UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,155	11/05/2001	Modesto Tabares	9209-10	5291

20792 7590 04/20/2005		EXAMINER
MYERS BIGEL SIBLEY & SAJOVEC		CAO, DIEM K
PO BOX 37428	ART UNIT	PAPER NUMBER
RALEIGH, NC 27627	2194	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 November 2004</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-57</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25,28-44 and 47-57</u> is/are rejected.

7)☒ Claim(s) <u>26-27,45 and 46</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-57 are pending.

Allowable Subject Matter

2.   Claims 7-8 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim

and any intervening claims.

3.   Claims 26-27 and 45-46 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

Claims 1-19 are rejected under 35 U.S.C. 101 because the language of the claim raises a

question as to whether the claim is directed merely to an abstract idea that is not tied to a

technological art, environment or machine which would result in a practical application

producing a concrete, useful, and tangible result to form the basis of statutory subject matter

under 35 U.S.C. 101.

Applicant could use "A computer implemented method" to avoid the problem.

Correction is required.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-5, 10, 12-13, 15-24, 29, 31-32, 34-43, 48, 50-51 and 53-57are rejected under 35

U.S.C. 102(e) as being anticipated by Kreissig et al. (U.S. 6,473,824 B1).

7.   **As to claim 1**, Kreissig teaches dynamically associating a first software component with

the device driver at run-time (it is possible … at runtime; col. 9, lines 1-3, starting from the IO

domain objects … a standardized object; col. 8, lines 22-29 and the access from the IO domain

object … IOHandler; col. 8, lines 50-54 and col. 2, lines 59-61), the first software component

containing information that facilitates communication with devices of a specific device type (the

classification … by the application program; col. 7, lines 40-67 and col. 8, lines 20-21).

8.   **As to claim 2**, Kreissig teaches defining a plurality of device parameters (col. 7, lines 47-

60, col. 8, lines 20-21), associating at least one of the plurality of device parameters with a

service (col. 7, lines 47-60), and communicating the at least one of the plurality of device

parameters associated with the service to the device driver (col. 9, lines13-22).

9.   **As to claim 3**, Kreissig teaches declaring a parameter base class that defines the plurality

of device parameters (class IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and

20-21), deriving a service-specific sub-class from the base class that defines the at least one of

the plurality of device parameters that are associated with the service (IOLineIn, IOLineOut; col.

8, lines 11-15 and 20-21), instantiating the service-specific sub-class to create a service-specific

sub-class object (Whenever an IO domain object ... instantiated; col. 9, lines 56-58), and

instantiating the parameter base class to create a parameter base class object (Whenever an IO

domain object ... instantiated; col. 9, lines 56-58).

10.   **As to claim 4**, Kreissig teaches passing the at least one of the plurality of device

parameters associated with the service from the service-specific sub-class object to the device

driver (col. 9, lines 12-22).

11.   **As to claim 5**, Kreissig teaches defining a plurality of common device parameters (class

IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and 20-21), defining a plurality

of service-specific device parameters (IOLineIn, IOLineOut; col. 8, lines 11-15 and 20-21),

associating the common device parameters with the service-specific device parameters (the

domain class ... for a digital line; col. 8, lines 13-15 and 20-21), and communicating the

common device parameters and the service-specific device parameters to the device driver (col.

9, lines 13-22).

12.   **As to claim 10**, Kreissig teaches selecting the first software component from a plurality

of software components, respective ones of the plurality of software components being

associated with respective ones of a plurality of device types (col. 7, lines 40-45, col. 8, lines 7-

15, col. 9, lines 55-57 and col. 9, line 66 – col. 10, line 1).

13.   **As to claim 12**, see rejection of claim 1 above. Kreissig further teaches receiving a

request to collect data from the device (readIOData (); col. 9, lines 13-22), retrieving data from

the device using the device driver (col. 9, lines 29-55).

14.   **As to claim 13**, Kreissig teaches associating at least one device parameter with a service

(col. 7, lines 47-60 and col. 8, lines 20-21), communicating the at least one device parameter to

the device driver (col. 9, lines13-22), and retrieving data associating with the at least one device

parameter from the device (col. 9, lines 29-55).

15.   **As to claim 15**, see rejection of claim 10 above.

16.   **As to claim 16**, Kreissig teaches defining a plurality of device parameters (col. 7, lines

47-60, col. 8, lines 20-21), associating at least one of the plurality of device parameters with a

service (col. 7, lines 47-60), and dynamically communicating the at least one of the plurality of

device parameters associated with the service to the device driver at run-time (it is possible ... at

runtime; col. 9, lines 1-3 and col. 9, lines 13-22).

17.   **As to claim 17**, Kreissig teaches defining a plurality of common device parameters (col. 7, lines 43-60 and col. 8, lines 7-8 and 20-21), and defining a plurality of service-specific device parameters (col. 8, lines 9-15 and 20-21).

18.   **As to claim 18**, Kreissig teaches associating the common device parameters with the service-specific device parameters (col. 7, lines 47-60), and dynamically communicating the common device parameters and the service-specific device parameters to the device driver at run-time (it is possible ... at runtime; col. 9, lines 1-3 and col. 9, lines 13-22).

19.   **As to claim 19**, Kreissig teaches declaring a parameter base class that defines the plurality of device parameters (class IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and 20-21), and deriving a service-specific sub-class from the base class that defines the at least one of the plurality of device parameters that are associated with the service (IOLineIn, IOLineOut; col. 8, lines 11-15 and 20-21).

20.   **As to claim 20**, it is the same as the method claim of claim 1 and is rejected under the same ground of rejection.

21.   **As to claim 21**, see rejection of claim 2 above.

22.   **As to claims 22-24**, see rejections of claims 3-5 above.

23.   **As to claim 29**, see rejection of claim 10 above.

24.   **As to claims 31-32**, see rejections of claims 12-13 above.

25.   **As to claim 34**, see rejection of claim 15 above.

26.   **As to claims 35-38**, see rejections of claims 16-18 above.

27.   **As to claim 39**, it is the same as the method claim of claim 1 and is rejected under the

same ground of rejection.

28.   **As to claim 40**, see rejection of claim 2 above.

29.   **As to claims 41-43**, see rejections of claims 3-5 above.

30.   **As to claim 48**, see rejection of claim 10 above.

31.   **As to claims 50-51**, see rejections of claims 12-13 above.

32.   **As to claim 53**, see rejection of claim 15 above.

33.   **As to claims 54-57**, see rejections of claims 16-18 above.

Claim Rejections - 35 USC § 103

34.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

35.   Claims 6, 9, 14, 25, 28, 33, 44 and 47 and 52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kreissig et al. (U.S. 6,473,824 B1) in view of Camara et al. (U.S.

2002/0059474 A1) further in view of Martin et al. (Professional XML).

36.   **As to claim 6**, Kreissig teaches declaring a parameter base class that defines the plurality

of common device parameters (class IOLine 503, the parent class for a digital line; col. 8, lines

14-15 and 20-21), wherein defining the plurality of service-specific device parameters comprises

providing a second software component (IOLineIn, IOLineOut; col. 8, lines 11-15 and 20-21),

and instantiating the parameter base class to create a parameter base class object (Whenever an

IO domain object ... instantiated; col. 9, lines 56-58).

37.   However, Kreissig does not teach the second software component that comprises one of a

script file and an extensible markup language file. Camara teaches the software component that

comprises a device script written in any type of script language that includes two files, one is

device model data file and the other is a device family data file (page 4, section 0036). Martin teaches the advantage of xml when sharing information (page 12).

38.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kreissig, Camara and Martin because it is easier to write in script language than machine-executable program, and easier to debug (page 4, section 0032).

39.   **As to claim 9**, Kreissig does not teach the first software component comprises one of a script file and an extensible markup language file. Camara teaches the software component that comprises a device script written in any type of script language that includes two files, one is device model data file and the other is a device family data file (page 4, section 0036). Martin teaches the advantage of xml when sharing information (page 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kreissig, Camara and Martin because it is easier to write in script language than machine-executable program, and easier to debug (page 4, section 0032).

40.   **As to claim 14**, see rejection of claim 9 above.

41.   **As to claims 25 and 28**, see rejections of claims 6 and 9 above.

42.   **As to claim 33**, see rejection of claim 14 above.

43.   **As to claims 44 and 47**, see rejections of claims 6 and 9 above.

44.   **As to claim 52**, see rejection of claim 14 above.

45.   Claims 11, 30 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kreissig et al. (U.S. 6,473,824 B1) in view of Ramberg et al. (U.S. 2005/0034029).

46.   **As to claim 11**, Kreissig does not teach generating the plurality of software components

based on a plurality of management information base files, respective ones of the plurality of

MIB files being associated with respective ones of the plurality of device types. Ramberg teaches

the MIB describes and provides management information for device (page 4, section 0039 and

page 5, section 0049). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teaching of Kreissig and Ramberg because it provides a

method to create the component based on existing information instead from scratch which will

save time and resources.

47.   **As to claims 30 and 49**, see rejection of claim 11 above.

Response to Arguments

48.   Applicant's arguments with respect to claims 1-57 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Diem Cao

SUE LAO
PRIMARY EXAMINER